Remarks/Arguments

With reference to the Office Action mailed June 30, 2005, Applicants offer the following remarks and argument.

Status of the Claims

Applicants have previously canceled claims 11-13 and 28 as drawn to a non-elected invention. The pending claims are claims 1,2, 4-10 and 13-22, and 24-27, being the claims of Group 1.

The remaining claims, or the base claims on which they depend, have been substantially amended to positively recite and characterize the "extraction" process. In that regard, claim 1[5] and 16[6] are exemplary.

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[5] 1. An information rearrangement method for rearranging information obtained from information sources connected via a network comprising: an information collection step of collecting information from a predetermined number of registered sites; an information element extraction step of extracting, from among said collected information, information elements that include the same facts that are referred to at multiple sites said information element extraction step comprising selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are effective for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs; and a display step of displaying the contents of said extracted information elements while changing the display state of said contents in accordance with the number of sites whereat said facts are referred to; said step of displaying comprising extracting a set of important information elements on a sentence level from a group composed of a predetermined number of sites, and folding the display for the same sets of important information elements.

[6] 4. An information rearrangement method for rearranging information obtained from information sources connected via a network comprising: an information collection step of collecting information from a predetermined number of registered sites; an information element extraction step of extracting, from among said collected information, information elements that include the same facts that are referred to at multiple sites, said information element extraction step comprising selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are effective for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs; and a

Discussion

Objections and Rejections under 35 USC 113

Applicants have amended the claims to obviate the objections and the rejections under 35 USC 112.

Claims 1-3,6-9, 13, 19-19, 22, 24, and 26 under 35 USC 102(e)

Claims 1-3,6-9, 13, 19-19, 22, 24, and 26 have been rejected under 35 USC 102(e) as anticipated by Patent Publication 2002/0138487 of Weiss et al. Weiss et al. describes collecting site metadata , i.e.,

> [0031] "... the set of properties comprises parameters relating to the site's importance, the nature of the site's owner, the existence of an e-store within the site, the existence of a "chat room" within the site, the existence of a forum within the site, the existence of multimedia file(s) and/or their amount and/or size within the site, the frequent used keywords in the textual data of the site, whether the site in "official", the essence of the site, and/or the amount of information in the site."

With a ranking of the site based on

> "[0032] ... the importance of a Web site is a function of the hyperlinks pointing to and from a Web site."

Weiss et al then describe a presentation where

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topic keyword extraction step of extracting a topic keyword that represents the entire set of information elements to be extracted; said topic keyword extraction step comprising a representative keyword extraction step, a set representative keyword extraction step, and a topic keyword collection step, and a display step of displaying the contents of said extracted information elements, while displaying said extracted topic keyword at a position different from the contents concerning said information elements.

[0137] "...the results are presented in a 2-D map on which the main clusters are displayed as continents ... in which the term "Charlie's Angels" appeared, are marked for the user. Of course alternatively this presentation can be a textual presentation or most preferably 3D presentation." and a hierarchical "jump" where

> [0139] "After selecting the Entertainment "continent" (the selection being carried out by clicking the selected object), the user is presented with the "countries"--TV series, Movies, Plays, Music, etc. Again, The countries, in which the search subjects have been found, are being marked to the user .... The size of the "country" is proportional to the number of the Web sites of this entity."

This includes

> [0149] "... an Indexing application 23, for carrying out the clustering, labeling and classification of the Web sites. The indexing is a process, which is carried out independent of the search process, and its purpose is to organize all the Web sites of the Web prior to the search. For example, the indexing concerns organizing all the Web sites in clusters, classifying the Web sites according to predetermined properties, etc.' where "[0155] ... the Indexing 23 comprises the activities of Clustering, Labeling and Classification of the Web sites according to the predefined attributes, as described above."

Claim 1 is exemplary. The claim recites –

> 1. An information rearrangement method for rearranging information obtained from information sources connected via a network comprising: an information collection step of collecting information from a predetermined number of registered sites; an information element extraction step of extracting, from among said collected information, information elements that include the same facts that are referred to at multiple sites <u>said information element extraction step comprising selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are effective for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns,</u>

predetermined proper nouns; and predetermined verbs; and a display step of displaying the contents of said extracted information elements while changing the display state of said contents in accordance with the number of sites whereat said facts are referred to; said step of displaying comprising extracting a set of important information elements on a sentence level from a group composed of a predetermined number of sites, and folding the display for the same sets of important information elements.

With the new limitations added by the present amendment.

Clearly, Weiss et al. neither teaches nor suggests these limitations.

Claims 4-5, 16-17, and 25 under 35 USC 103(a) as unpatentable over Weiss in view of Brown.

Weiss is applied for its teaching of a "spider" and information extraction, but it is conceded in the Office Action Weiss et al. does not teach displaying extracted keywords at a position different from the contents concerning the extracted words. However, it is stated that Brown overcomes this deficiency, column 4, lines 43-45, viz.,

> "An object of this invention is a system and method that generates a hierarchical grouping of topically and structurally relevant objects in a query context."

It is also stated that Weiss et al., Figure 13 shows keywords above the positions of the search results, and that Brown et al., column 16, lines 13-29, suggests the subject matter of claims 5 and 17.

Brown, column 16, lines 13-29 teaches

> The result of step 900 is a display of ranked hierarchies where children are shown grouped and indented under their parent. An example of such a display is shown in FIG. 13. FIG. 13 shows a sample output result of the system. The Figure shows the result of

> iterating step 635 once, such that a two level hierarchy is generated. The original topically relevant objects supplied in step 610 are displayed indented as 1320. The structurally relevant parent objects found after one iteration of step 635 are displayed non-indented as 1310. The parent objects 1310 form the next level of the hierarchical view, provide navigational starting points for browsing the relevant objects, and group the topically relevant child objects 1320. The display provides the end user with insight into the structure of the object collection being searched. Attributes for each of the objects shown in the display are obtained from the Object Catalog 210 and Attribute Tables 250.

While, claim 4, as amended, by way of exemplification, recites

> 4. An information rearrangement method for rearranging information obtained from information sources connected via a network comprising: an information collection step of collecting information from a predetermined number of registered sites; an information element extraction step of extracting, from among said collected information, information elements that include the same facts that are referred to at multiple sites, said information element extraction step comprising selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are effective for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs; and a topic keyword extraction step of extracting a topic keyword that represents the entire set of information elements to be extracted; said topic keyword extraction step comprising a representative keyword extraction step, a set representative keyword extraction step, and a topic keyword collection step, and a display step of displaying the contents of said extracted information elements, while displaying said extracted topic keyword at a position different from the contents concerning said information elements.

Clearly, the cited portion of Brown does not teach or suggest the subject matter of the claims, nor does the combination of Weiss with Brown.

Claims 8, 14-15, and 23 rejected under 35 USC 103(a) as unpatentable over Weiss et al. in view of Lawrence et al.

Lawrence is cited for the teaching of Figure 3, and the disclosure of an "autonomous citation index system" which is "an autonomous citation indexing system is completely automatic, autonomously extracts citations, identifies identical citations which occur in different formats, and identifies the context of citations in the body of the articles." (Abstract)

Claim 8 is exemplary, and recites

> 6. An information rearrangement method for rearranging information obtained from information sources connected via a network comprising: an information collection step of periodically crawling a group of registered sites and collecting information; an information element extraction step of extracting, from among a set of information elements at ~~the~~ individual sites in said group, information elements that convey the same facts; and an importance level calculation step of providing an importance level in accordance with the number of sites that are referred to; said information element extraction step comprising selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are effective for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs.
>
> (Presently Amended) 8. The information rearrangement method according to **claim 6**, wherein important information elements on ~~the~~ a sentence level, for which an importance level is provided at said importance level calculation step, are rearranged in the descending order of their importance levels and are presented visually.

Lawrence does not teach or suggest this element and does not overcome the recognized deficiencies of Weiss et al.

Claims 9-10, 20-21, and 27 rejected under 35 USC 103(a) as unpatentable over Weiss in view of Logan

Logan (Column 1, lines 7-10) describes:

> This invention relates to electronic information distribution systems and more particularly to a method for indexing, combining, managing and distributing information via the Internet.

while claim 9, which is exemplary, recites:

> 9. An information rearrangement method comprising the steps of: extracting information elements from multiple sites; said step of extracting information elements comprising selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are effective for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs, and determining whether, of said information elements extracted from said multiple sites, there are relevant information elements that convey the same facts as sentence-level information elements that constitute an arbitrary web page; and when said relevant information elements that include the same facts as said sentence-level information elements are present in said information elements obtained from said multiple sites, adding remark information to said sentence-level information elements to provide information concerning said arbitrary web page.

Logan describes, at Column 5, lines 3-10:

> The metadata which describes a particular resource need not be derived directly from that resource; for example, external resources which link to or which review a given resource may be used as a source of metadata which describes the given resource. By way of example, reviews or comments on a given Web site may be analyzed to develop an attribute value which quantifies the degree to which such comments and reviews were favorable or unfavorable.

while claim 10 (dependent on claim 9, above), which is exemplary, recites:

> "wherein said web page with said added remark information is displayed, and said relevant information elements are displayed by designating said remark information."

This combination is not taught or suggested by Logan alone, Weiss alone, or the combination of Weiss with Logan.

Conclusion

It is respectfully submitted that the pending claims address the points raised in the Office Action of June 30, 2005 and describe an invention that is properly allowable to the Applicants.

If any issues remain unresolved despite the present amendment, the Examiner is requested to telephone Applicants' Attorney at the telephone number shown below to arrange for a telephonic interview before issuing another Restriction Requirement or Advisory Action.

Applicants would like to take this opportunity to thank the Examiner for a thorough and competent examination and for courtesies extended to Applicants' Attorney.

Respectfully Submitted

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Date of deposit: September 30, 2005

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